



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

648.4709

Job Sheet 172731



Part No: 648.4709

Job Qty: 1 ea

Part Name: SWA10A Overhaul



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 2/21/18

Job Tracking No:

Due Date: 4/27/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG OM_OOPM-SWA10A Rev 3 (648.4709) IPP Rev A 18.01.25 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea		4/27/18	0.00	0.00	Start Up Small Fab-4		MLC
110	Small Fab	1 pcs		4/27/18	0.00	0.00	Small Fab-4		MLC DAS
120	QC	1 pcs		4/27/18	0.00	0.00	QC5		38
121	DC	1 pcs		4/27/18	0.00	0.00	DC		9-89
130	Packaging	1 pcs		4/27/18	0.00	0.00	Packaging3-1	6102	APR 24 2018
140	QC21-FG	1 Ea		4/27/18	0.00	0.00	QC21		APR 24 2018

Part Op 110 - Pick bag and tag.

Descriptions: 121 - Supply owner's & overhaul procedures manual

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
188-FPSS-1032-1/2	Set Screw	1 Ea (1 ea)	90-Start up Operation	5037670
188-FPSS-1032-3/8	Set Screw	1 Ea (1 ea)	90-Start up Operation	5037669
188-FPSS-1032-5/8	Set Screw	1 Ea (1 ea)	90-Start up Operation	5037083
188-FSCS-1032-5/8	Wire Clamp Screw	4 Ea (4 ea)	90-Start up Operation	5031242
600.1319	Up Decal	1 Ea (1 ea)	90-Start up Operation	5036704
EL314-SJTOW	3 Wire	6 ft (6 ea)	90-Start up Operation	5029542
SWA10A-1100	Upper DU Bearing	1 Ea (1 ea)	90-Start up Operation	5036190
SWA10A-1200	Lower DU Bearing	1 Ea (1 ea)	90-Start up Operation	5036727
SWA10A-1300	Roller Thrust Bearing	1 Ea (1 ea)	90-Start up Operation	5036191
SWA10A-1400	Circlip	1 Ea (1 ea)	90-Start up Operation	5049928
SWA10A-400	Thrust Washer	1 Ea (1 ea)	90-Start up Operation	5027243
SWA6A-1900	Female Spade Terminal - 1/4"	12 Ea (12 ea)	90-Start up Operation	5029410
SWA6A-2000	1/8" Female Spade Connector	4 Ea (4 ea)	90-Start up Operation	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	188-FPSS-1032-1/2	1	100	0
	188-FPSS-1032-3/8	1	100	0
	188-FPSS-1032-5/8	1	199	0
	188-FSCS-1032-5/8	4	184	0
	600.1319	1	250	0
	EL314-SJTOW	6	247	0
	SWA10A-1100	1	6	0

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____		DISPOSITION		AGAINST DEPARTMENT/PROCESS	
Part No. _____		Rework ☐		Skid-tube ☐	
NCR No. _____		Scrap ☐		Machining ☐	
		Use-as-is ☐		Thermoforming ☐	
		Suspected Unapproved ☐		Large Fab ☐	
Date : _____		Step #: _____		QTY Effect _____	
Description Work Order Deviation					
				roval	
				y	
				ervisor ication	
				rdinator al	
Root Cause					
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature ☐	d Wrong	
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Dimensions	
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	der tolerance	
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Dan ☐	orrect	
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection I ☐	t/Missing	
Material ☐	Use for Testing ☐	Cuffs ☐	Contamina' ☐	ved	
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersin ☐	g	
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Sh ☐	id	
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructor ☐	g Sequence	
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : ☐			
Misidentified ☐	Past Due ☐				

Date: 04/19/18

Inspector: _____

Revision: 3

Serial No/Batch: 172731

Job No: 648.4709

Part: 648.4709

Container No: S062693

DART Aerospace Ltd.

1220 Aberdeen Street

Hamersburg, ON K6A 1K7

CANADA

TEL: 1 813 632-5200

Email: sales@dartaero.com

www.dartaerospace.com

SWA10A-1200	1	10	0
SWA10A-1300	1	10	0
SWA10A-1400	1	10	0
SWA10A-400	1	0	0
SWA6A-1900	12	88	0
SWA6A-2000	4	100	0

Part Specifications

Specifications could not be found.

Plex 2/21/18 2:18 PM Dart.lajeunesse.marie

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 172731

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MLB
1802-21

SWA10A-600

SWA10A-500

SWA10A-1300

SWA10A-300

SWA10A-1200

SWA10A-400

LOWER END

SET SCREW

C10-28

WIRE CLAMP

188-FSCS-1032-5/8 4X

SWA10A-1800

SWA10A-1400

UPPER END SWIVEL

WIRE CLAMP

ROTARY CONTACT

SWA10A-1100

CONNECTOR BUSHING

DART
AEROSPACE

1. FOR REBUILD ONLY.
2. ALL ASSEMBLY TO BE DONE IN ACCORDANCE WITH SWA SWIVEL MANUAL.
3. 8 WIRE STRIP OUTER JACKET & DOUBLE LAYER HEAT SHRINK.

				REV 3	
TITLE SWA 10A SWIVEL					
DWG NO. SWA 10A					
MAT'L		UNLESS OTHERWISE SPECIFIED			
MEAT		DIMENSIONS ARE IN INCHES			
HEAT		FRACTIONS = 1/8			
FINISH		ANGLES = 5°			
SPEC		SURFACES = 125/√			
DRAWN BY: GILBERT		1. BREAK ALL SHARP EDGES			
CHECKED: DD 04/18/2017		2. 015 X 45° OR .015H			
OPPS APPR: AA 05/05/2017		3. DIMENSIONAL LIMITS APPLY			
QA APPR: JL 05/10/2017		4. INTERPRET DIM AND TOL PER ASME Y14.5M-2009			
APPROVED: JAG 06/02/2017		USED ON MODEL			
SCALE	1:4	DATE	11/14/2012	SHEET 1 OF 2	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

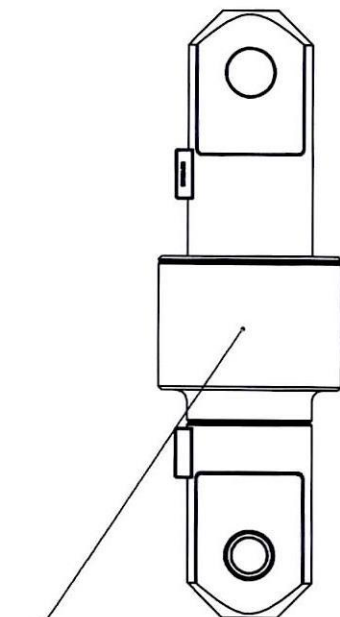
QA Closed: _____ Date: _____

Work Order update only ☐

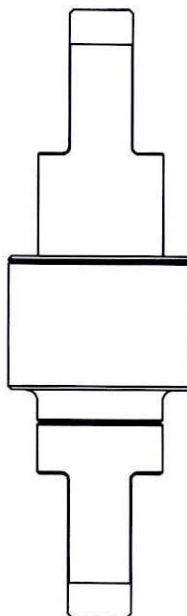
Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

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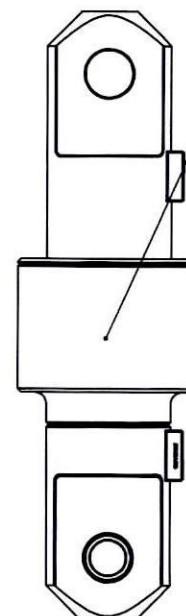
REVISIONS			
REV	ECR	DESCRIPTION	DATE INITIAL APPROVED



LASER ENGRAVE DART LOGO



ENGRAVE P/N, S/N, SWL



DART AEROSPACE	
TITLE SWA10A SWIVEL	
DWG NO. SWA10A	REV 3
MAT'L HEAT TREAT FINISH SPEC	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 SURFACES = 125/✓
DRAWN BY: GILBERT	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DD 04/18/2017	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: AA 05/05/2017	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: JL 05/10/2017	USED ON MODEL
APPROVED: JAG 06/02/2017	
SCALE 1:4	DATE 11/14/2012 SHEET 2 OF 2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER :					